

FORM PTO-1390  
(REV 10-94)

U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE

ATTORNEY'S DOCKET NUMBER

TRANSMITTAL LETTER TO THE UNITED STATES  
DESIGNATED/ELECTED OFFICE (DO/EO/US)  
CONCERNING A FILING UNDER 35 U.S.C. 371

14565.0005USWO

U.S. APPLICATION NO. (If known, see 37 C.F.R. 1.5)

Unknown 10/511927

INTERNATIONAL APPLICATION NO.

PCT/CN03/00079

INTERNATIONAL FILING DATE

January 27, 2004

PRIORITY DATE CLAIMED

April 23, 2002

TITLE OF INVENTION

BASE-BAND DIGITAL PRE-DISTORTION-BASED METHOD FOR IMPROVING EFFICIENCY OF RF POWER AMPLIFIER

APPLICANT(S) FOR DO/EO/US

LONG

Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:

1. ☒ This is a **FIRST** submission of items concerning a filing under 35 U.S.C. 371.
2. ☐ This is a **SECOND** or **SUBSEQUENT** submission of items concerning a filing under 35 U.S.C. 371.
3. ☒ This express request to begin national examination procedures (35 U.S.C. 371(f)) at any time rather than delay examination until the expiration of the applicable time limit set in 35 U.S.C. 371(b) and PCT Articles 22 and 39(1).
4. ☒ A proper Demand for International Preliminary Examination was made by the 19th month from the earliest claimed priority date.
5. ☒ A copy of the International Application as filed (35 U.S.C. 371(c)(2))
  - a. ☒ is transmitted herewith (required only if not transmitted by the International Bureau).
  - b. ☒ has been transmitted by the International Bureau.
  - c. ☐ is not required, as the application was filed in the United States Receiving Office (RO/US)
6. ☒ A translation of the International Application into English (35 U.S.C. 371(c)(2)).
7. ☒ Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3))
  - a. ☐ are transmitted herewith (required only if not transmitted by the International Bureau).
  - b. ☐ have been transmitted by the International Bureau.
  - c. ☐ have not been made; however, the time limit for making such amendments has NOT expired.
  - d. ☒ have not been made and will not be made.
8. ☐ A translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).
9. ☒ An unsigned oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)).
10. ☐ A translation of the annexes to the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)).

**Items 11. to 16. below concern document(s) or information included:**

11. ☒ An Information Disclosure Statement under 37 CFR 1.97 and 1.98.
12. ☐ An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.
13. ☒ A **FIRST** preliminary amendment.  
☐ A **SECOND** or **SUBSEQUENT** preliminary amendment.
14. ☐ A substitute specification.
15. ☐ A change of power of attorney and/or address letter.
16. ☒ Other items or information: Application Data Sheet (3 pages), Form 1449, 1 reference, Form PCT/RO/101, Form PCT/RO/105, Form PCT/ISA/202, Form PCT/ISA/210, Form PCT/ISA/220, Form PCT/IB/301, Form PCT/IB/304, Form PCT/IB/308, Form PCT/IB/332, Form PCT/IPEA/409, Form PCT/IPEA/416

U.S. APPLICATION NO. (If known, see 37 C.F.R. 1.5) Unknown <b>10/511927</b>		INTERNATIONAL APPLICATION NO. PCT/CN03/00079		ATTORNEY'S DOCKET NUMBER 14565.0005USWO	
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17. <input checked="" type="checkbox"/> The following fees are submitted:				<b>CALCULATIONS</b> PTO USE ONLY	
<b>BASIC NATIONAL FEE (37 CFR 1.492(a) (1)-(5)):</b> Search Report has been prepared by the EPO or JPO..... <b>\$950.00</b>  International preliminary examination fee paid to USPTO (37 CFR 1.492(a)(1)) ..... <b>\$750.00</b>  No international preliminary examination fee paid to USPTO (37 CFR 1.482) but international search fee paid to USPTO (37 CFR 1.445(a)(2)) ..... <b>\$790.00</b>  Neither international preliminary examination fee (37 CFR 1.482) nor international search fee (37 CFR 1.445(a)(3)) paid to USPTO..... <b>\$1100.00</b>  International preliminary examination fee paid to USPTO (37 CFR 1.482) and all claims satisfied provisions of PCT Article 33(2)-(4)..... <b>\$100.00</b>					
<b>ENTER APPROPRIATE BASIC FEE AMOUNT =</b>					
Surcharge of <b>\$130.00</b> for furnishing the oath or declaration later than <input type="checkbox"/> 20 <input type="checkbox"/> 30 months from the earliest claimed priority date (37 CFR 1.492(e)).					
CLAIMS	NUMBER FILED	NUMBER EXTRA	RATE		
Total claims	10                      -20 =	0	X <b>\$18.00</b>		
Independent claims	1                                -3 =	0	X <b>\$88.00</b>		
MULTIPLE DEPENDENT CLAIM(S) (if applicable)				+ <b>\$300.00</b>	
<b>TOTAL OF ABOVE CALCULATIONS =</b>				<b>\$950.00</b>	
Reduction by 1/2 for filing by small entity, if applicable. Small entity status is claimed pursuant to 37 CFR 1.27				<b>\$0</b>	
<b>SUBTOTAL =</b>				<b>\$950.00</b>	
Processing fee of <b>\$130.00</b> for furnishing the English translation later than <input type="checkbox"/> 20 <input type="checkbox"/> 30 months from the earliest claimed priority date (37 CFR 1.492(f)).				+ <b>\$0</b>	
<b>TOTAL NATIONAL FEE =</b>				<b>\$950.00</b>	
Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property				+ <b>\$0</b>	
<b>TOTAL FEES ENCLOSED =</b>				<b>\$950.00</b>	
				Amount to be: refunded	<b>\$0</b>
				charged	<b>\$0</b>

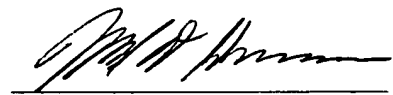
a. ☒ Check(s) in the amount of \$950.00 to cover the above fees is enclosed.

b. ☐ Please charge my Deposit Account No. \_\_\_\_\_ in the amount of \$ \_\_\_\_\_ to cover the above fees.  
A duplicate copy of this sheet is enclosed.

c. ☒ The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any  
overpayment to Deposit Account No. 13-2725.

**NOTE: Where an appropriate time limit under 37 CFR 1.494 or 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the application to pending status.**

SEND ALL CORRESPONDENCE TO:  
Michael D. Schumann  
MERCHANT & GOULD  
P.O. Box 2903  
Minneapolis, MN 55402-0903

SIGNATURE: 

NAME: Michael D. Schumann

REGISTRATION NUMBER: 30,422

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: LONG  
 Docket: 14565.0005USWO  
 Title: BASE-BAND DIGITAL PRE-DISTORTION-BASED METHOD FOR IMPROVING  
 EFFICIENCY OF RF POWER AMPLIFIER

## CERTIFICATE UNDER 37 CFR 1.10

'Express Mail' mailing label number: EV 408493333 US

Date of Deposit: October 18, 2004

I hereby certify that this paper or fee is being deposited with the United States Postal Service 'Express Mail Post Office To Addressee' service under 37 CFR 1.10 and is addressed to Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

By:   
 Name: David Ortiz

Mail Stop PCT  
 Commissioner for Patents  
 P.O. Box 1450  
 Alexandria, VA 22313-1450

Sir:

We are transmitting herewith the attached:


- ☒ Transmittal sheet, in duplicate, containing Certificate under 37 CFR 1.10.
- ☒ National Stage PCT Patent Application: Spec. 20 pgs; 10 claims; Abstract 1 pgs.  
The fee has been calculated as shown below in the 'Claims as Filed' table.
- ☒ 8 sheets of formal drawings
- ☒ An unsigned Combined Declaration and Power of Attorney
- ☒ A check in the amount of \$950.00 to cover the Filing Fee
- ☒ Information Disclosure Statement, Form 1449, 1 reference(s).
- ☒ Application Data Sheet, 3 pages.
- ☒ Other: Form PTO-1390, Preliminary Amendment (7 pages), WO 03/092154 A1, Form PCT/RO/101, Form PCT/RO/105, Form PCT/ISA/202, Form PCT/ISA/210, Form PCT/ISA/220, Form PCT/IB/301, Form PCT/IB/304, Form PCT/IB/308, Form PCT/IB/332, Form PCT/IPEA/409, Form PCT/IPEA/416
- ☒ Return postcard

## CLAIMS AS FILED

Number of Claims Filed		In Excess of:		Number Extra		Rate		Fee
<b>Basic Filing Fee</b>								\$950.00
<b>Total Claims</b>								
10	-	20	=	0	x	18.00	=	\$0.00
<b>Independent Claims</b>								
1	-	3	=	0	x	88.00	=	\$0.00
MULTIPLE DEPENDENT CLAIM FEE								\$0.00
TOTAL FILING FEE								\$950.00

Please charge any additional fees or credit overpayment to Deposit Account No. 13-2725. A duplicate of this sheet is enclosed.

MERCHANT & GOULD P.C.  
 P.O. Box 2903, Minneapolis, MN 55402-0903  
 (612) 332-5300

By:   
 Name: Michael D. Schumann  
 Reg. No.: 30,422  
 Initials: MDS/sbd

23552

PATENT TRADEMARK OFFICE

(PTO TRANSMITTAL - NEW FILING)

10/511927

DT05 Rec'd PCT/PTO 18 OCT 2004

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## DOCKET NOTIFICATION SLIP

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### TO: PATENT DOCKETING

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MDS/sbd NO FF